

ISLAMIC ARCHITECTURE

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DEFINITION OF TERMS

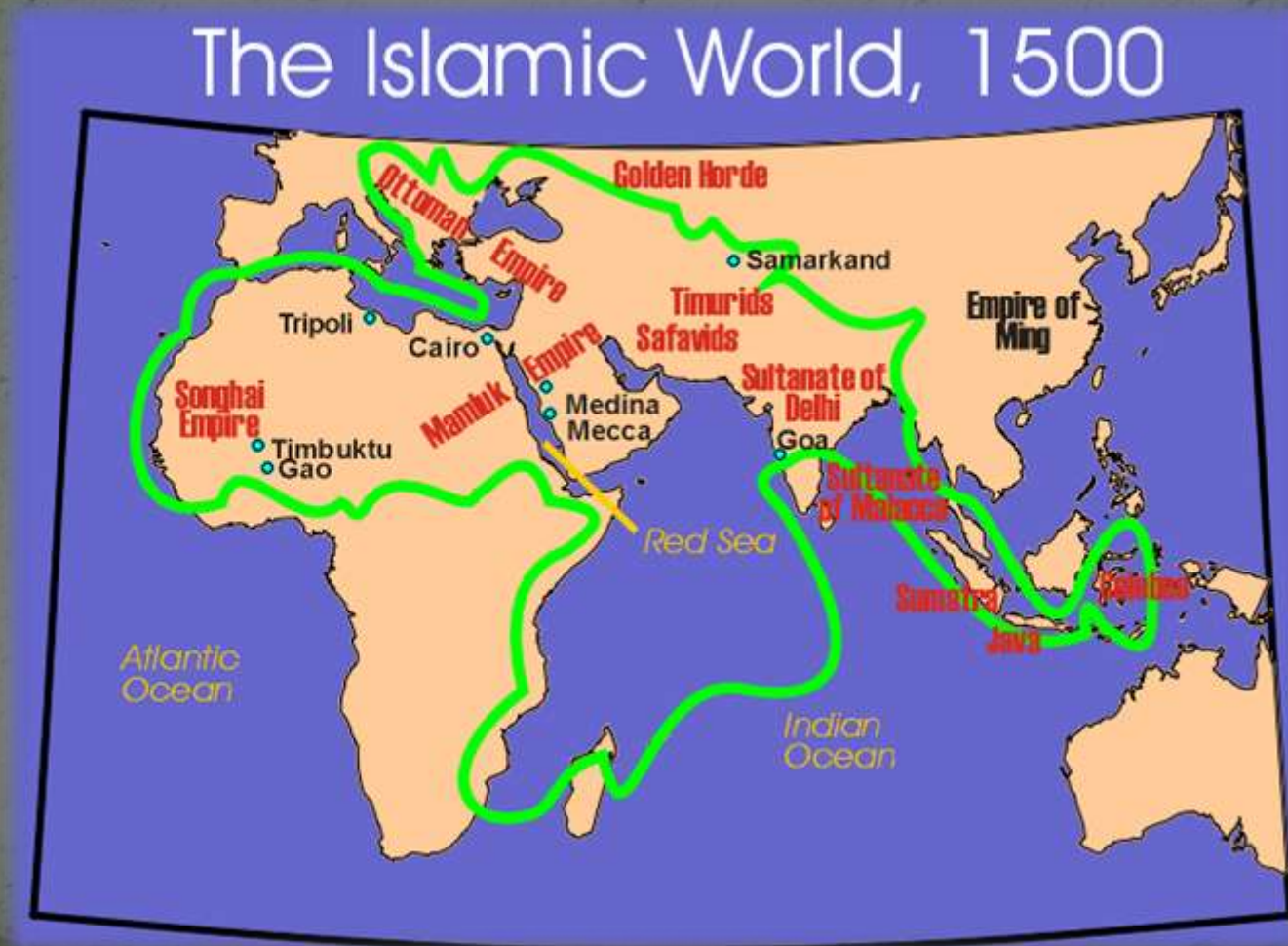
- **HADITH** – collection of Mohammed's sayings or injunctions and is lesser weight, while the law is extracted from the prophet's instructions, from tradition and example.
- **ISLAM** – means submission
- **MOSQUE** - a Muslim house of worship
- **MUSLIM** – those who submit to the expression of the will of God by the prophet Mohammed.
- **NICHE** – something(as a sheltered or private space) that resembles a recess in a wall

Islamic Architecture

- Islamic architecture can be defined as a building traditions of Muslim populations of the Middle east and any countries where Islam has been dominant from the 7th century on.

GEOGRAPHY

- Flourished principally in the countries of Southern Asia and North Africa.



GEOGRAPHY

- Other important communities were established in isolation outside the geographical block, in places such as ZANZIBAR, MADAGASCAR and CHINA, while in twentieth century mobility has brought Islam to outposts throughout the world, the architectural consequences in apparently unlikely places as far apart as Sydney and south shields.



MAP 1-3 THE ISLAMIC WORLD AND TRADE, 1335

GEOGRAPHY

- The spread of Islam has been frequently associated with **MILITARY CONQUEST, RACIAL MOVEMENTS** and in some cases with the **CONSEQUENT DISPLACEMENT OF ESTABLISHED POPULATIONS**. The most important of these movements were the Arab expansion northwards and westwards out of the Arabian Peninsula, and the drive of the Turkish and Mongol groups south, south-east and south-west of the Central Asia.

GEOLOGY

- The countries into which Islam first expanded were already rich in building tradition and the important techniques of exploitation of natural resources for building works and trade in building materials had long been established. Brick making and walling was almost universal in the alluvial plains; MARBLE was generically available as an article of trade. Building to the stone occur in variety. There was a long tradition of CERAMIC production, use of GYPSUM PLASTER, GLASS manufacture and the various forms of METALWORKS for building.



MAP 1-3 THE ISLAMIC WORLD AND TRADE, 1335

HISTORY

- Muslim chronology dates from A.D. 622, the year of Hegira (Hijrah), when Mohammed moved from Mecca to Medina. In the succeeding ten years of his life Mohammed established the framework of the religion and the beginnings of the military organization charge with spreading the faith. Immediately after his death in 632. The concerned efforts of the Arabian tubes carried then as conquerors into Central Asia and westwards towards the Atlantic.
- Islamic Architecture encompasses a wide range of both secular and religious styles from the foundation of Islam to the present day, influencing the design and construction of buildings and structures in Islamic culture. The principal Islamic Architectural types are: the MOSQUE, the TOMB, the PALACE and FORT. From these four types, the vocabulary of Islamic Architecture is derived and used for buildings of less importance such as PUBLIC BATHS, FOUNTAINS ad DOMESTIC ARCHITECTURE.

SOCIAL

- The Arab groups, which were the spearhead of the advance of Islam, were essentially tribal, and in consequence the behavior patterns and cultural attributes of emergent Islamic societies were based on the traditions of the desert. As Muslim communities became stabilized over the succeeding centuries, a clear social pattern emerged in which public life was reserved for men. Women played a secondary role, almost inevitably assuming major share of domestic, and sometimes of the agricultural burden.
- Men performed the significant public duties and controlled all public affairs, and this social structure had direct architectural consequences in the layout of domestic and public buildings.

RELIGIOUS

- Date founded:
 - A.D. 622
- Place founded:
 - Mecca, Saudi Arabia
- Founder:
 - Mohammed (born c.570), a trade merchant from Arabia
- Adherents:
 - 1.3 billion
- Size rank (religion statistics):
 - second largest in the world
- Main location:
 - Middle East and North Africa
- Sacred text:
 - Qur'an (Koran)
- Original language:
 - Arabic

- House of worship:
 - mosque
- Ultimate reality:
 - God (*Allah* in Arabic); the same God revealed in the Jewish and Christian Bibles
- Type of theism:
 - strict monotheism
- Purpose of life:
 - Submit to the will of Allah and attain paradise after death
- How to live:
 - Follow the Qur'an, Hadith and Five Pillars of Islam
- *The Five Pillars of Islam are:*
 - Daily confession of faith (*shahada*)
 - Daily ritual prayer (*salat*)
 - Paying the alms tax (*zakat*)
 - Fasting during the month of Ramadan (*sawm*)
 - Pilgrimage to Mecca (*hajj*)
- Afterlife:
 - Resurrection of body and soul followed by eternal paradise or hell
- Symbols:
 - crescent moon and star

- Mohammed,
The prophet of
Muslims



اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ
سَمِيعٌ عَلِيمٌ

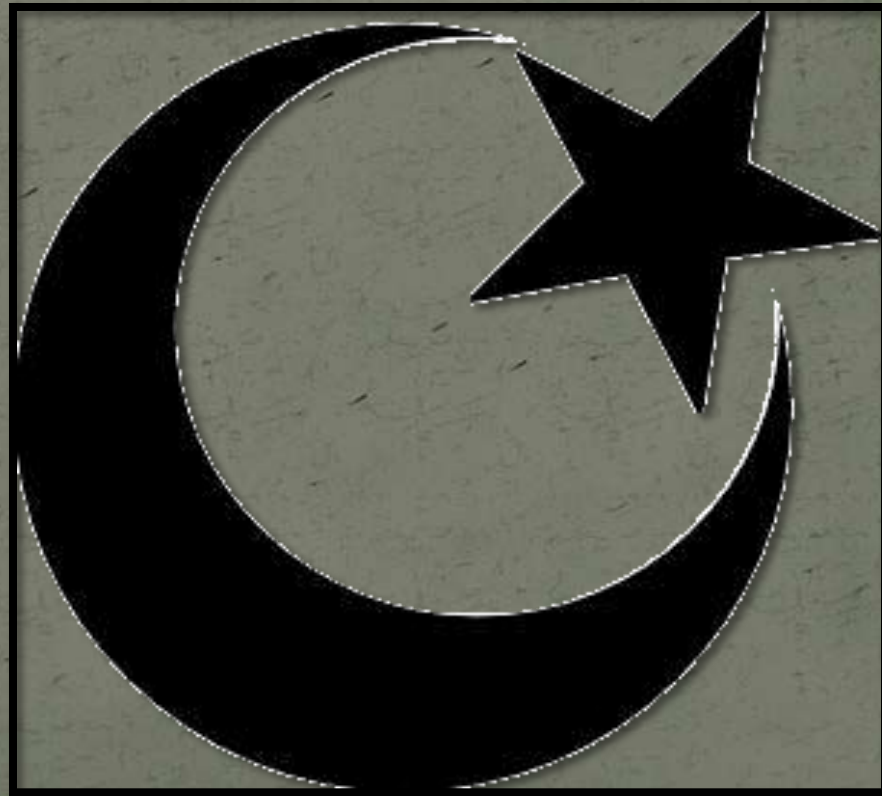
- Koran



- Mosque



- Crescent moon and Star



- The Islamic faith produced in successive generations a way of life and a set of attitudes which had a great influence on their architecture. These may be summarized as: **an acceptance** of the transitory nature of earthly life; personal humility; an abhorrence of images worship. The effects of those beliefs on Islamic architecture can be seen in the following characteristics: **there is no** essential differentiation in techniques between buildings with directly religious connotation and other buildings; **that** important architectural endeavor is normally expended on buildings having a direct social or community purpose, including that of worships, **that** decorations tend towards the abstract, using geometric, calligraphic and plant motifs, with a preference for a uniform field of decoration rather than a focal element; **and that** a basic conservatism discouraged innovations and favored established forms.

TERMINOLOGY

■ BUILDING TYPES

- Masjid (Persia, India)
- Jami: mosque, principal place of worship, or use of the building for Friday prayers
- Mesjid: (Turkey) small prayer house
- Madrassah: (Egypt)
- Saray, Serai: palace

■ BUILDING COMPONENTS

- Mihrab: niche oriented towards Mecca
- Mimber: raised platform for ceremonial announcements
- Iwan, Ivan: (Persia): open-fronted vault facing on to a court
- Bab: gateway
- Sahn: courtyard of a mosque
- Minaret: tower from which call to prayer is made
- Harem: women's or private quarters of a house or palace
- Selamluk: men's or guest's quarters
- Kibla, Kible: axis orientated towards Mecca
- Chatti (India): Kiosk

TERMINOLOGY

■ PERSONNEL

- Muezzin: caller who summons the faithful to prayer
- Iman: man who leads the congregation at prayer
- Caliph: successor to the prophet as military, judicial and spiritual leader of Islam

Types of Islamic Architecture

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Islamic Architecture

Definition

Islamic architecture can be define as a building traditions of Muslim populations of the Middle East and any countries where Islam has been dominant from the 7th century on.

Types of Islamic Architecture

- Mosque – muslim centre @ place for **worship**
- Madrasah – public school
- Hammam - A structural design for a **hot bathhouse**
- Caravanserai - A roadside inn for travellers
- Casbah/Citadel - a fortress
- Mausoleum - a tomb or a monument



ARCHITECTURAL CHARACTER

- Islamic Architecture Contains:
 - Balance and symmetry
 - Concept of perfect creation
 - Formal Landscape
 - Centered upon God
 - Use of Striated Masonry

Striated Masonry

- Striated Masonry (alternate bands of bricks and stone) was borrowed from Byzantium.



Parts of a Mosque

- Note: A mosque may serve many functions other than prayer. It may be used as a school, transactions may be made there and storage for treasurers.
- **Minaret** – a tall tower in, or continuous to, a mosque arch stairs leading up to one or more balconies. Also from which the faithful are called to prayer



Parts of a Mosque

- Courtyard – is so fundamental feature of the mosque is also in its several variations. According to their function the courtyards were cloistered and arcaded and the sides were punctuated with gateways, prayer chambers or arched porches (iwans).



Parts of a Mosque

- **Kiosk** – used in isolation as a little ornamental pavilion, emphasizing a roof, or providing a focus in a pleasure garden; it might take the form of the massive tomb, high and domed, or it might be repeated to form a cloister, terrace or court. It is almost a universal rule in Islamic building that each cell of a complex building structure is individually expressed, in plan and in volume.

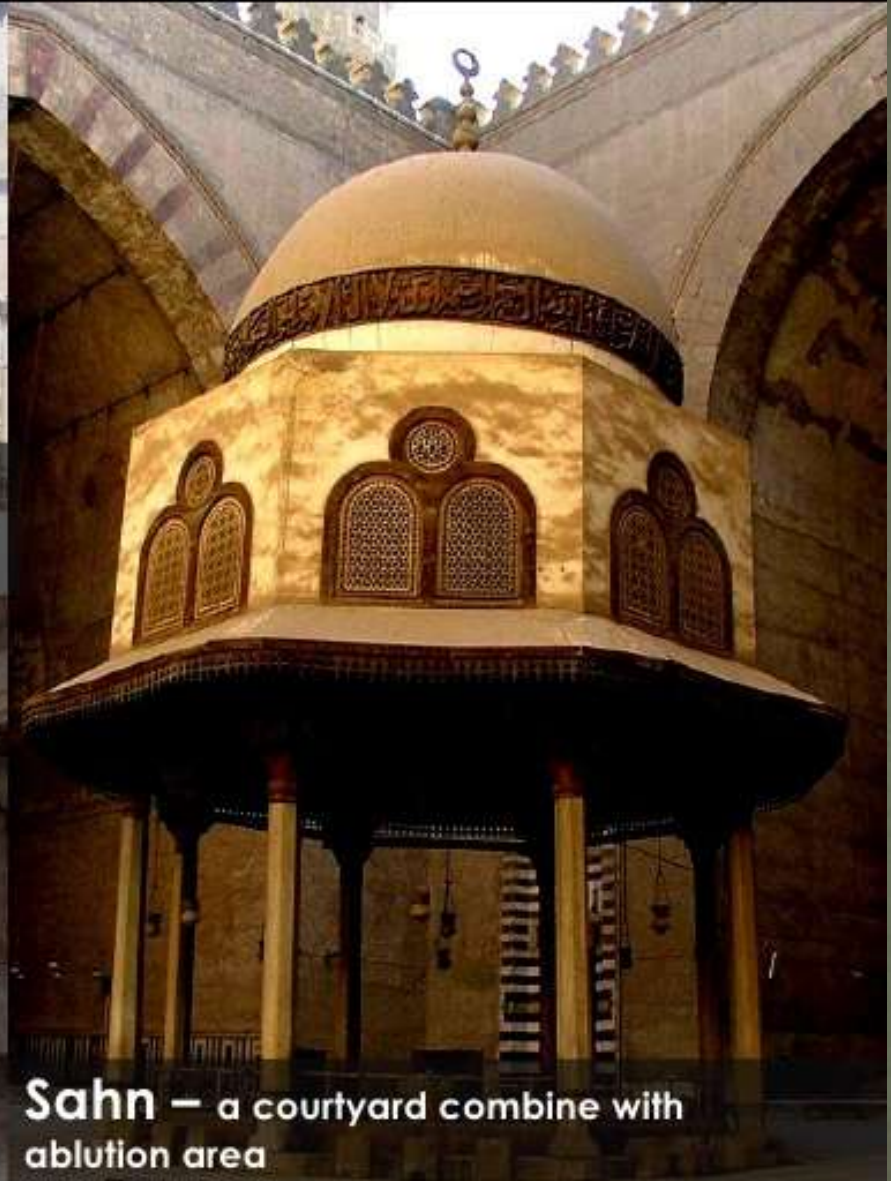




Mashrabiya — projecting window enclosed with carved wood latticework



Mihrab - semicircular niche in the wall of a mosque that indicates the qibla



Sahn — a courtyard combine with ablution area



Minaret - visual focal point and are used for the call to prayer



Dome - focal point and covering the main prayer hall



Dikka — a place of delivering royal message



Mimbar — a pulpit where imam deliver khutbah



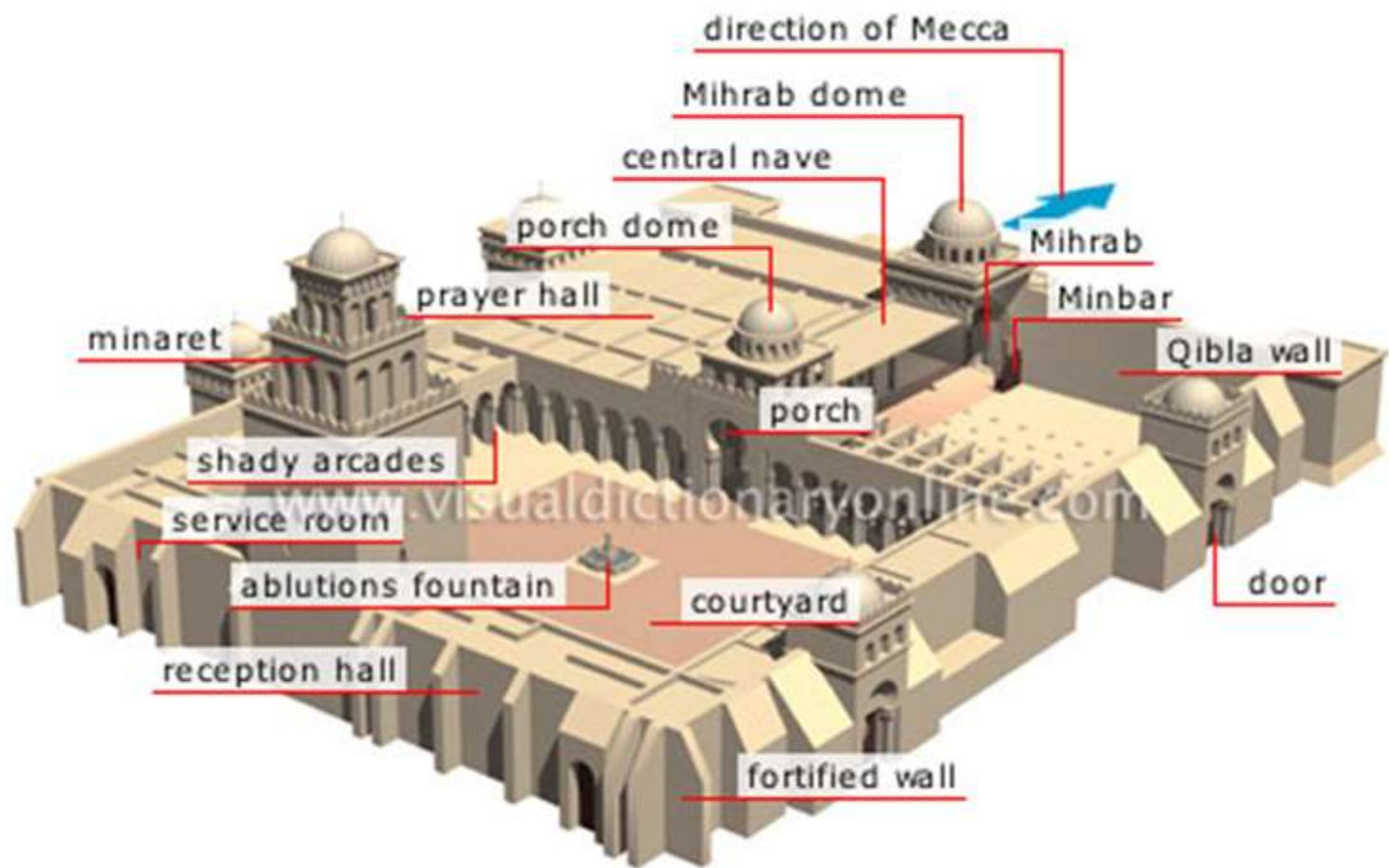
Muqarnas - stalactite vault, Persian architectural ornament



Praying area hall – main area to perform congregational pray

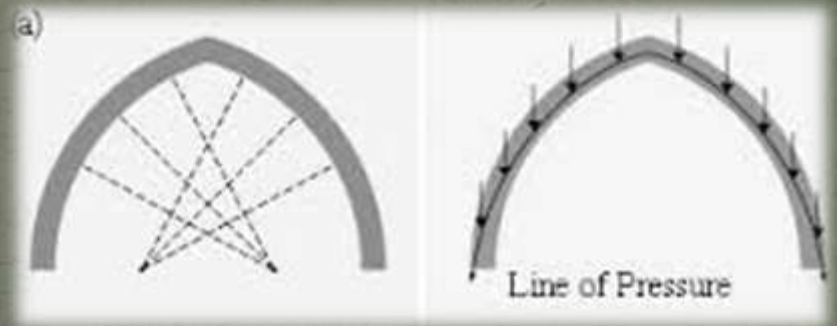


Arch – structure that spans a space while supporting weight



Mosque Architectural Features

- The most important form of opening was the pointed arch which was principally two and four-centered and generally constructed as a true arch though corbelled examples were common in India.



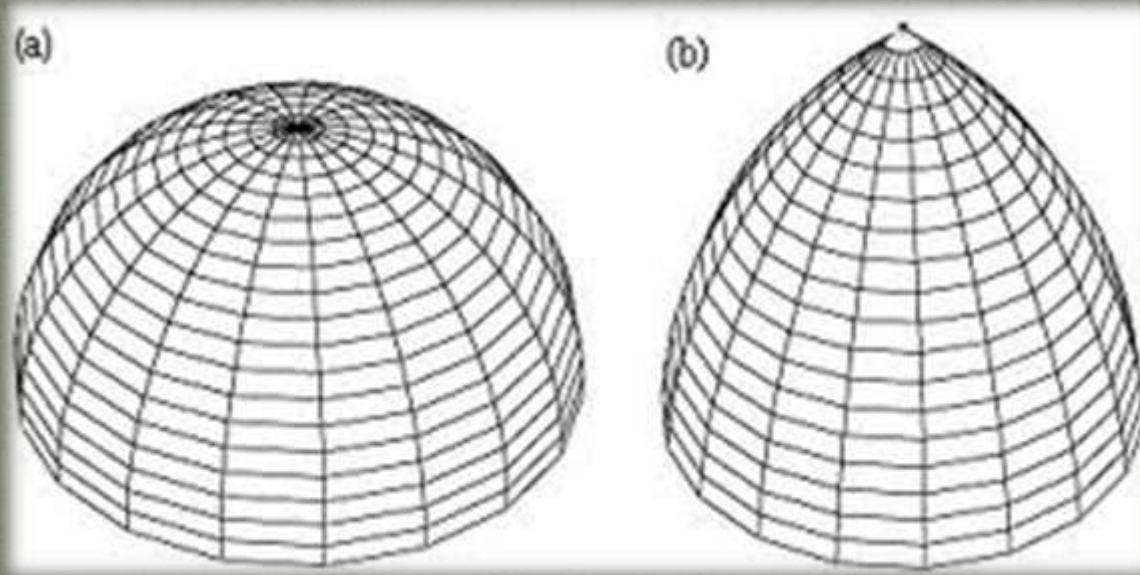
Mosque Architectural Features

- Window openings were frequently small and traditionally closed with wooden shutters, iron bars, marble grilles or plaster lights set with clear glass.



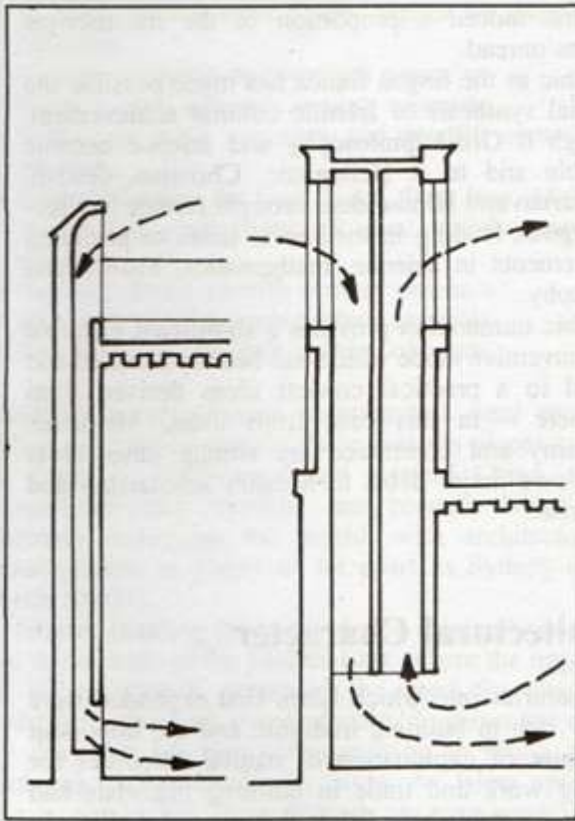
Mosque Architectural Features

- Domes were widely used throughout the Islamic world; Persia, Mughal and Egypt domes tended to be pointed in contrast to the hemi-spherical Turkish version.



Mosque Architectural Features

- Wind-scoops were added to the construction techniques in order to meet the climatic conditions.



C. Wind-scoops. See p 571



D. Wind-scoop: exterior

Islamic Decorative Elements

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Islamic Decorative Elements



Water

In hot Islamic climates, the water from courtyard pools and fountains **cools as it decorates**. Water can not only reflect architecture and multiply the decorative themes, it can also serve as a means of emphasizing the visual axes.

Islamic Decorative Elements

The Islamic Decorative Canon



Calligraphy



Geometric

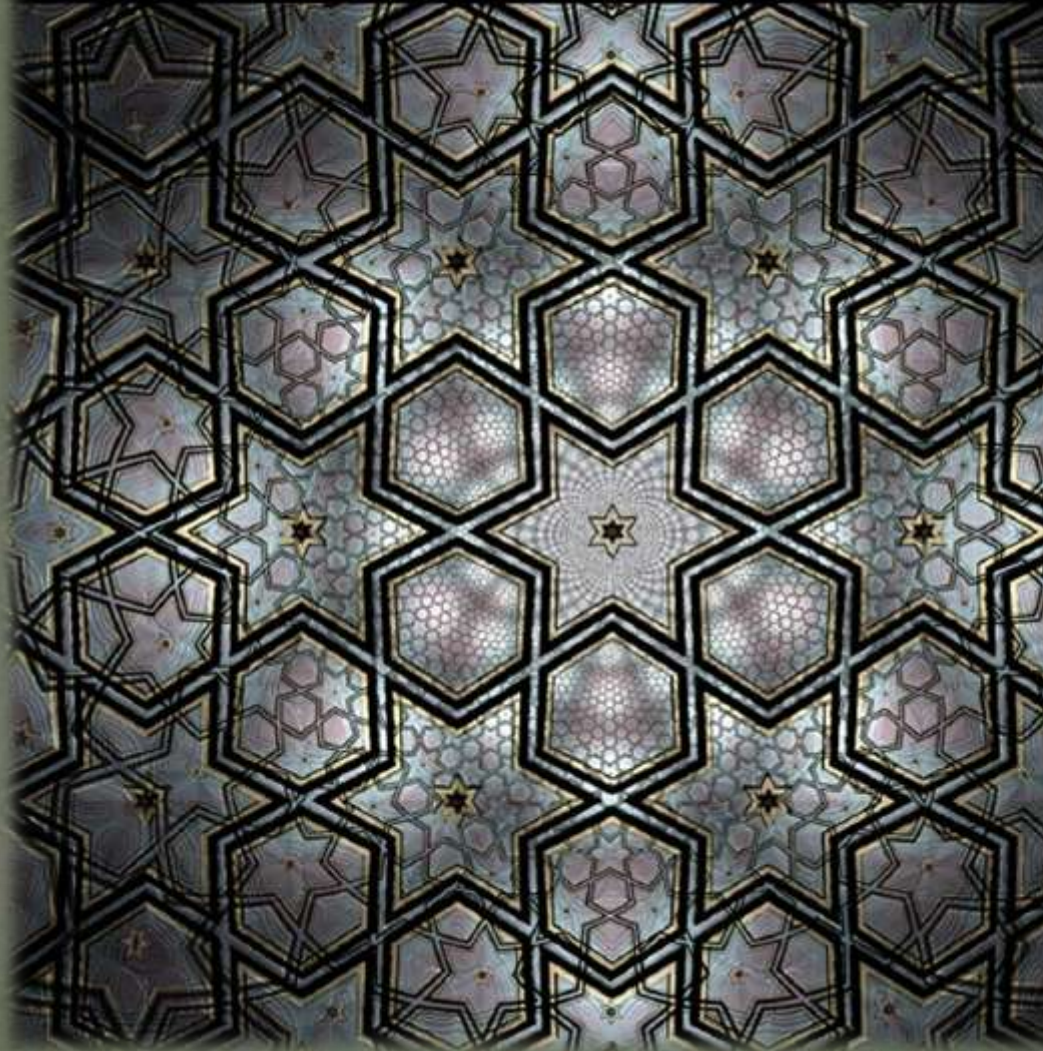


Arabesque

Islamic Decorative Elements

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Islamic Decorative Elements



Geometric Pattern

These patterns exemplify the Islamic interest in **repetition, balance, symmetry and continuous generation of pattern.**

The integration of geometry with such **optical effects as the balancing of positive and negative areas, a skillful use of color and tone values.**

Islamic Decorative Elements

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Islamic Decorative Elements



Arabesque (islami)

Arabesque designs are biomorphic, **floral patterns** representing the underlying order and unity of **nature** with a great **deal of accuracy**. flowers and trees might be used as the **motifs** for the **decoration** of **textiles, objects and buildings**.

Islamic Decorative Elements

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Islamic Decorative Elements



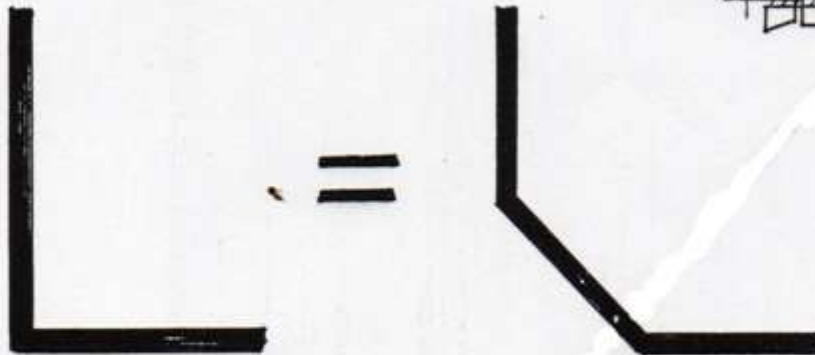
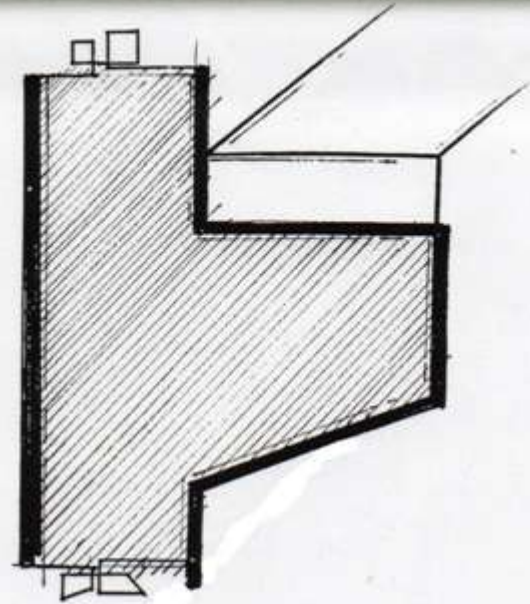
Calligraphy

Like other Islamic decoration, calligraphy is closely **linked to geometry**. The **proportions of the letters** are all governed by **mathematics**. **Inscriptions** are most often used as a frame along and around main elements of a building like portals and cornices.

Islamic Decorative Elements

CORBEL

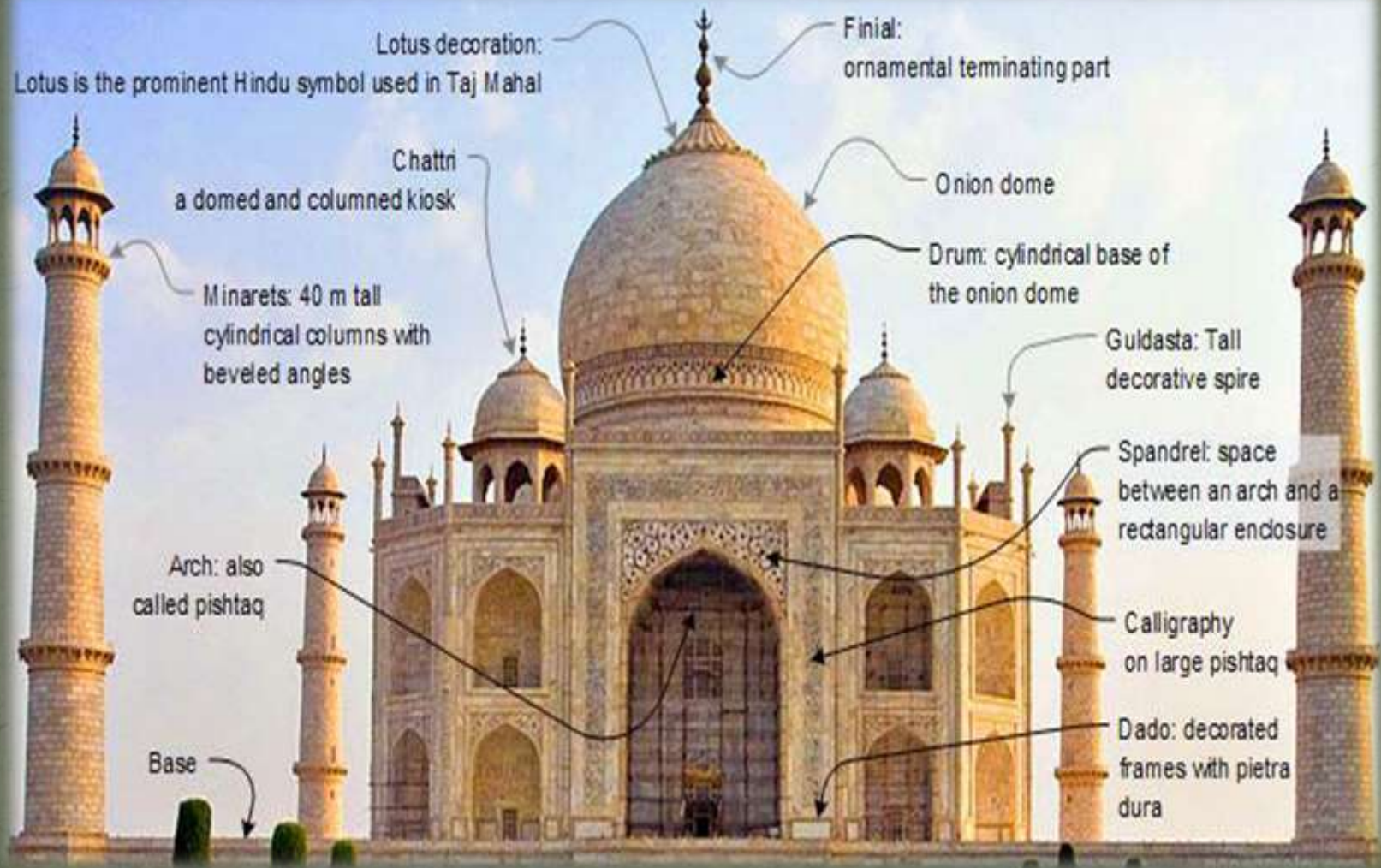
- A BLOCK OF STONE, OFTEN ELABORATELY CARVED OR MOULDED, PROJECTING FROM A WALL, SUPPORTING THE BEAMS OF A ROOF FLOOR OR VAULT.



CHAMFER

- A DIAGONAL CUTTING OF AN ANGLES FORMED BY TWO SURFACES MEETING AT AN ANGLE.

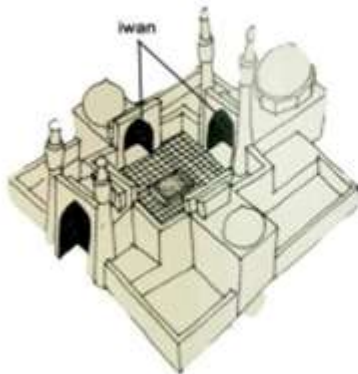
Typical Elevation of a Mosque



Mosque Typology

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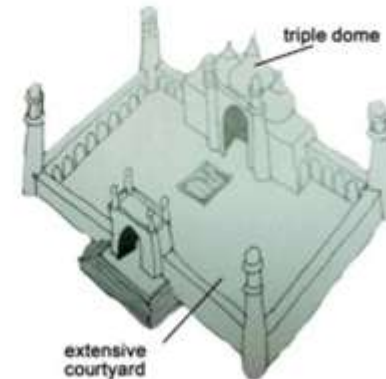
Mosque Typology



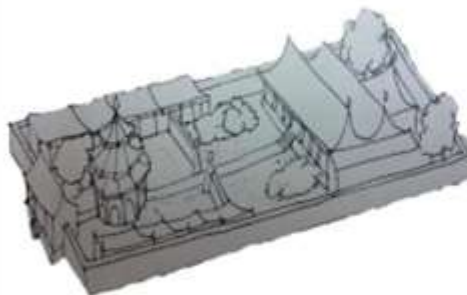
Iran and central Asia:
The bi-axial four iwan type



Anatolia:
Use of massive central dome



The Indian subcontinent:
Triple domes and an extensive
courtyard

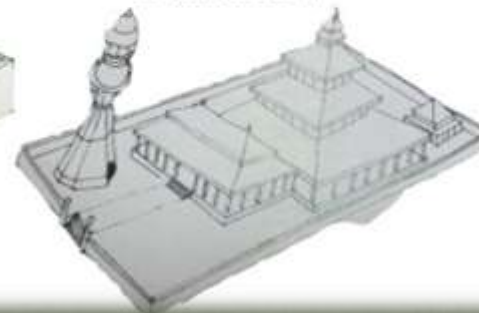


China:
Detached pavilions within a
Walled garden enclosure

Spain, North Africa:
The hypostyle hall and open
courtyard



South-East Asia:
Central pyramidal roof
construction



EXAMPLES OF ISLAMIC STRUCTURE AND THEIR ANALYSES

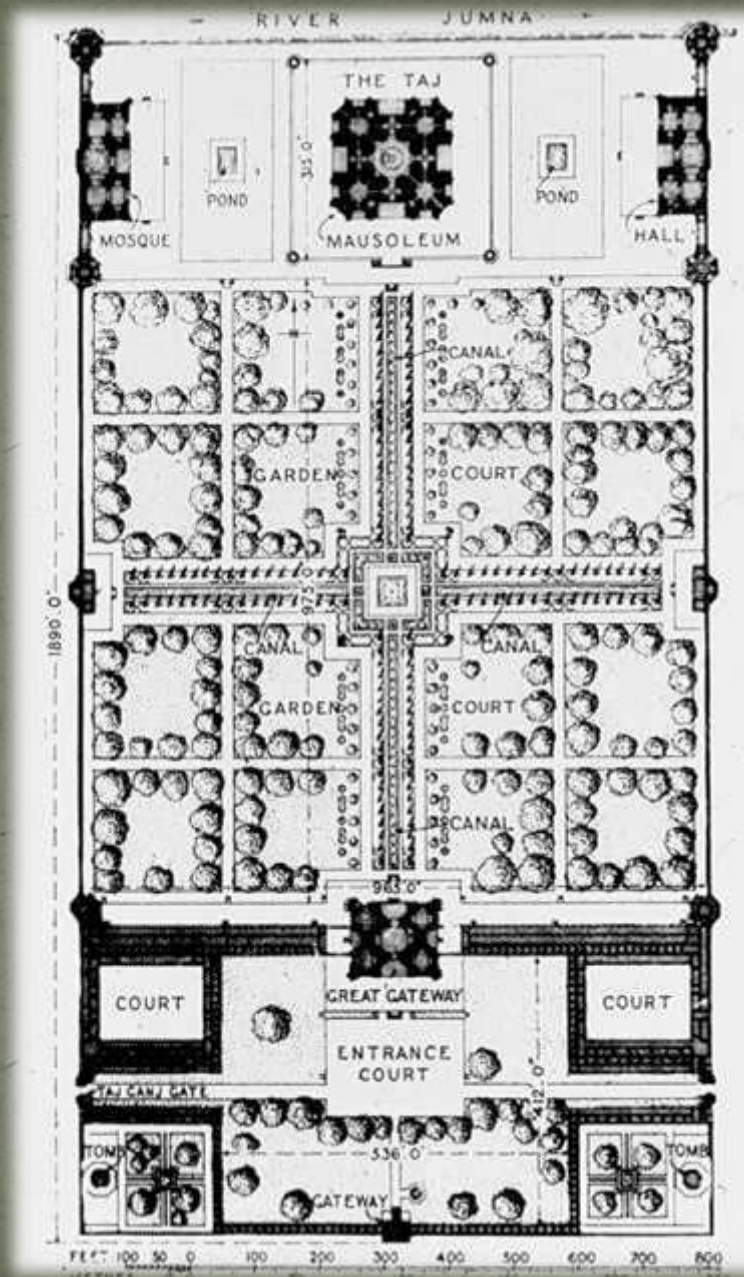
- Taj Mahal

- In the tradition of Mughal tombs stood formally laid out walled garden, with kiosk and entered through pavilion gateways. It was the culminating work in the life of the emperor Shaj Jehan, erected to the memory of his favorite wife, Mumtaz Mahal



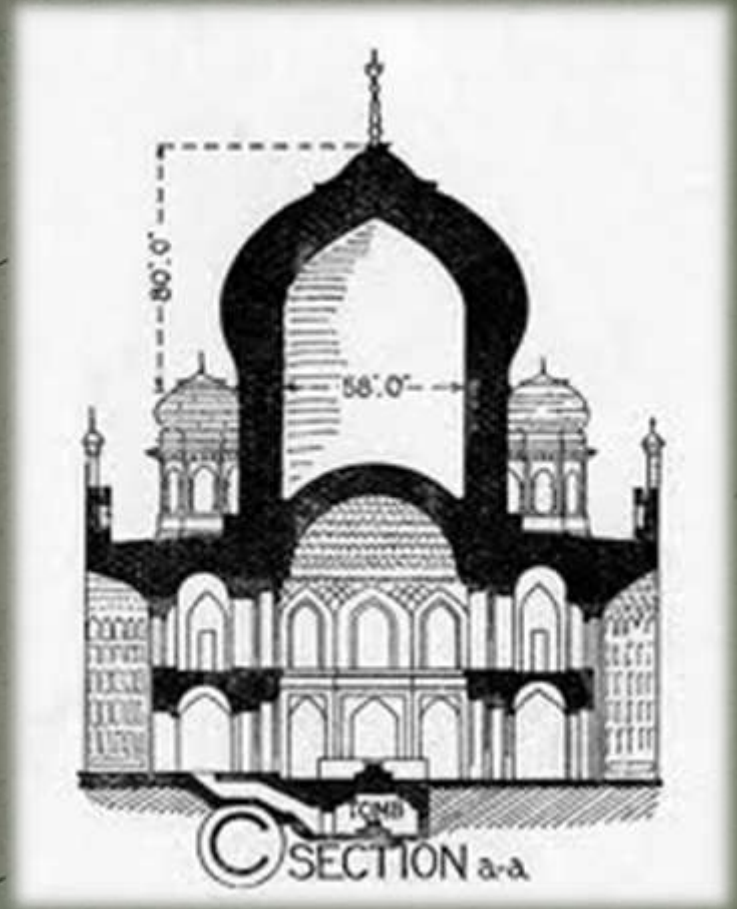
Taj Mahal Architectural Plan

- Located in Agra, Uttar Pradesh, India
- The Mausoleum itself is 57 M (107 Ft.) square in plan and the structure consists in effect of four complex, but basically octagonal, towers linked together to carry a great dome spanning the central space between them. Smaller dome pavilions cap each tower and circular tapering minaret stand each corner of the podium on which the structure stands



Taj Mahal Section

- The central inner dome 24.5 M (80 Ft.) high and 17.7 M (58 Ft.) in diameter, but it is surmounted by an outer shell nearly 61 M ((200 Ft.) in height. The tombs Shah Jehan and his wife are enclosed with a marble screen of incredible elaboration and delicacy.



Chinli Kiosk

- Located at Istanbul (1472)
- Is an unusual and lovely building on a plan much influenced by Persian structures. A uniform central space is surmounted by a dome and surrounded by other dome chambers and verandahs. The façade is formed by a long arcaded verandah of great elegance, almost unique in its Persian character.

